

P23705.A01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Hiroshi NOMURA

Appl. No. : 10/646,712

Filed : August 25, 2003

For : RETRACTABLE LENS BARREL



Group Art Unit : 2851

Examiner : Not Yet Assigned

Confirmation No. : 9825

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir :

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98,

Applicant hereby calls the following documents to the Examiner's attention:

Initially, Applicant notes that the present application is one of 27 commonly-assigned patent applications which were all filed on August 25, 2003, some of which have features similar to some of those of the present application. These 27 commonly-assigned patent applications are listed as follows:

- (1) U.S. Patent Application No. 10/646,748, which published as U.S. Patent Application Publication No. 2004/0042095 to NOMURA on March 4, 2004;
- (2) U.S. Patent Application No. 10/646,872, which published as U.S. Patent Application Publication No. 2004/0042093 to NOMURA on March 4, 2004;

P23705.A01

- (3) U.S. Patent Application No. 10/646,824, which published as U.S. Patent Application Publication No. 2004/0062536 to NOMURA on April 1, 2004.
- (4) U.S. Patent Application No. 10/646,711 to NOMURA, entitled "A Lens Barrel Incorporating the Rotation Transfer Mechanism," which was filed on August 25, 2003;
- (5) U.S. Patent Application No. 10/646,735, which published as U.S. Patent Application Publication No. 2004/0051968 to NOMURA on March 18, 2004;
- (6) U.S. Patent Application No. 10/646,836, which published as U.S. Patent Application Publication No. 2004/0051970 to NOMURA on March 18, 2004;
- (7) U.S. Patent Application No. 10/646,871, which published as U.S. Patent Application Publication No. 2004/0062537 to NOMURA on April 1, 2004;
- (8) U.S. Patent Application No. 10/646,908, which published as U.S. Patent Application No. 2004/0051972 to NOMURA on March 18, 2004;
- (9) U.S. Patent Application No. 10/646,788, which published as U.S. Patent Application Publication No. 2004/0042091 to NOMURA on March 4, 2004;
- (10) U.S. Patent Application No. 10/646,724 to NOMURA, entitled "A Lens Barrel Incorporating the Cam Mechanism," which was filed on August 25, 2003;
- (11) U.S. Patent Application No. 10/646,736, which published as U.S. Patent Application Publication No. 2004/0042089 to NOMURA on March 4, 2004;
- (12) U.S. Patent Application No. 10/646,882, which published as U.S. Patent Application Publication No. 2004/0051971 to NOMURA on March 18, 2004;
- (13) U.S. Patent Application No. 10/646,884, which published as U.S. Patent Application Publication No. 2004/0042777 to NOMURA on March 4, 2004;

P23705.A01

- (14) U.S. Patent Application No. 10/646,907, which published as U.S. Patent Application Publication No. 2004/0042778 to NOMURA on March 4, 2004;
- (15) U.S. Patent Application No. 10/646,907, which published as U.S. Patent Application Publication No. 2004/0051969 to NOMURA on March 18, 2004;
- (16) U.S. Patent Application No. 10/646,723 to NOMURA, entitled "Optical Element Retracting Mechanism for a Retractable Lens," which was filed on August 25, 2003;
- (17) U.S. Patent Application No. 10/646,698, which published as U.S. Patent Application Publication No. 2004/0051967 to NOMURA on March 18, 2004;
- (18) U.S. Patent Application No. 10/646,811, which published as U.S. Patent Application Publication No. 2004/0042775 to NOMURA on March 4, 2004;
- (19) U.S. Patent Application No. 10/646,771, which published as U.S. Patent Application Publication No. 2004/0042096 to NOMURA on March 4, 2004;
- (20) U.S. Patent Application No. 10/646,860 to NOMURA, entitled "Optical Element Retracting Mechanism for a Photographing Lens," which was filed on August 25, 2003;
- (21) U.S. Patent Application No. 10/646,895 to NOMURA, entitled "Optical Element Retracting Mechanism for a Photographing Lens," which was filed on August 25, 2003;
- (22) U.S. Patent Application No. 10/646,772, which published as U.S. Patent Application Publication No. 2004/0042090 to NOMURA on March 4, 2004;
- (23) U.S. Patent Application No. 10/646,812, which published as U.S. Patent Application Publication No. 2004/0042776 to NOMURA on March 4, 2004;
- (24) U.S. Patent Application No. 10/646,859 to NOMURA, entitled "Retractable Photographing Lens," which was filed on August 25, 2003;

P23705.A01

(25) U.S. Patent Application No. 10/646,712 to NOMURA, entitled "Retractable Lens Barrel," which was filed on August 25, 2003;

(26) U.S. Patent Application No. 10/646,759, which published as U.S. Patent Application Publication No. 2004/0051981 to NOMURA on March 18; and

(27) U.S. Patent Application No. 10/646,800, which published as U.S. Patent Application Publication No. 2004/0042092 to NOMURA on March 4, 2004.

Further to the U.S. Patent and Trademark Office's decision to waive the requirement under 37 C.F.R. §1.98 (a)(2)(i), copies of the above-noted U.S. published applications are not enclosed herewith. Applicant notes that documents (14)-(16) are the most relevant to the present application. Applicant also notes that document (25) is the present application. A copy of unpublished document (16) is also being provided herewith. However, if any copies of the other unpublished applications are needed, the Examiner is requested to contact the undersigned.

Applicant also brings to the Examiner's attention the following documents:

(28) Japanese Laid-Open Patent Publication No. 58-145930, which was published on August 31, 1983, together with U.S. patent family member U.S. Patent No. 4,525,050 to OHASHI, which issued on June 25, 1985;

(29) Japanese Laid-Open Patent Publication No. 61-69002, which was published on April 9, 1986, together with U.S. patent family member U.S. Patent No. 4,643,555 to WAKABAYASHI, which issued on February 17, 1987;

(30) Japanese Laid-Open Patent Publication No. 61-270737, which was published on December 1, 1986, together with U.S. patent family member U.S. Patent No. 4,721,972 to WAKABAYASHI, which issued on January 26, 1988;

P23705.A01

- (31) Japanese Laid-Open Patent Publication No. 63-149629, which was published on June 22, 1988, together with U.S. patent family member U.S. Patent No. 4,792,822 to AKIYAMA et al., which issued on December 20, 1988;
- (32) Japanese Utility Model Publication No. 64-34623, which was published on March 2, 1989, together with an English language translation of the same;
- (33) Japanese Laid-Open Patent Publication No. 6-18777, which was published on January 28, 1994, together with an English language translation of the same;
- (34) Japanese Laid-Open Patent Publication No. 7-191249, which was published on July 28, 1995, together with English patent family member U.S. Patent No. 5,818,647 to NISHIO et al., which issued on October 6, 1998;
- (35) Japanese Laid-Open Patent Publication No. 11-109203, which was published on April 23, 1999, together with U.S. patent family member U.S. Patent No. 6,031,998 to SHONO, which issued on February 29, 2000;
- (36) U.S. Patent No. 4,451,129 to IKARI et al., which issued on May 29, 1984;
- (37) U.S. Patent No. 4,643,554 to OGAWA, which issued on February 17, 1987;
- (38) U.S. Patent No. 4,771,303 to MATSUMOTO et al., which issued on September 13, 1988;
- (39) U.S. Patent No. 4,887,107 to NAKAMURA et al., which issued on December 12, 1989;
- (40) U.S. Patent No. 5,136,324 to TSUBOI et al., which issued on August 4, 1992;
- (41) U.S. Patent No. 5,765,049 to HASE et al., which issued on June 9, 1998;
- (42) U.S. Patent No. 5,832,326 to TANAKA, which issued on November 3, 1998;
- (43) U.S. Patent No. 6,366,323 to SHONO, which issued on April 2, 2002. Applicant notes reissue application Nos. 10/815,193 and 10/815,194 were filed for this commonly assigned

P23705.A01

patent on April 1, 2004, which have features similar to some of those of the present specification. Applicant submits herewith copies of the claims of these reissue applications and notes that the specifications have not been amended.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320031.8 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042095, which has been listed as document No. 1), in which the United Kingdom Patent Examiner cited the following documents:

- (44) U.S. Patent No. 6,115,190 to HIRAI, which issued on September 5, 2000; and
- (45) U.S. Patent No. 6,064,533 to KENIN et al., which issued on May 16, 2000.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320033.4 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042093, which has been listed as document No. 2), in which the United Kingdom Patent Examiner cited the following documents:

- (46) U.S. Patent Application Publication No. 2003/0081325 to NOMURA et al., which was published on May 1, 2003; and
- (47) U.S. Patent Application Publication No. 2001/0024573 to NOMURA et al., which was published on September 27, 2001.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320034.2 (which is the patent family member of U.S.

P23705.A01

Patent Application Publication No.2004/0062536, which has been listed as document No. 3), in which the United Kingdom Patent Examiner cited the following documents:

(48) U.S. Patent Application Publication No. 2002/0135900 to NOMURA et al., which was published on September 26, 2002; and

(49) Japanese Laid-Open Patent Publication No. 58-10708, which was published on January 21, 1983, together with an English language Abstract of the same.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320032.6 (which is the patent family member of U.S. Patent Application No. 10/646,711, which has been listed as document No. 4), in which the United Kingdom Patent Examiner cited the following documents:

(50) United Kingdom Patent Application Publication No. GB 2 344 661, which was published on June 14, 2000; and

(51) U.S. Patent No. 6,075,655 to FUNAHASHI et al., which issued on June 13, 2000.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320050.8 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051968, which has been listed as document No. 5), in which the United Kingdom Patent Examiner cited the following documents:

(52) United Kingdom Patent Application Publication No. GB 2 262 356, which was published on June 16, 1993; and

P23705.A01

(53) Japanese Laid-Open Patent Publication No. 2003-207709, which was published on July 25, 2003, together with an English language Abstract of the same.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United Kingdom Patent Application No. GB 0320046.6 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051970, which has been listed as document No. 6), in which the United Kingdom Patent Examiner cited the following document:

(54) U.S. Patent Application Publication No. 2002/0135901 to NOMURA et al., which was published on September 26, 2002.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320051.6 (which is the patent family member of U.S. Patent Application Publication No. 2004/0062537, which has been listed as document No. 7), in which the United Kingdom Patent Examiner cited the following documents:

(55) U.S. Patent Application Publication No. 2003/0081327 to NOMURA et al., which was published on May 1, 2003;

(56) U.S. Patent Application Publication No. 2002/0135896 to NOMURA et al., which was published on September 26, 2003;

(57) United Kingdom Patent Application Publication No. GB 2 309 551, which was published on July 30, 1997; and

(58) U.S. Patent No. 6,055,116 to NOMURA et al., which issued on April 25, 2000.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United Kingdom Patent Application No. GB 0320047.4 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051972, which has been listed as document No. 8), in which the United Kingdom Patent Examiner cited the following documents:

- (59) U.S. Patent No. 6,204,977 to IWASA, which issued on March 20, 2001; and
- (60) U.S. Patent No. 5,430,516 to UZIII et al., which issued on July 4, 1995.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 26, 2004, with respect to United Kingdom Patent Application No. GB 0320049.0 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042091, which has been listed as document No. 9), in which the United Kingdom Patent Examiner cited the following documents:

- (61) U.S. Patent Application Publication No. 2003/0081948 to NOMURA et al., which was published on May 1, 2003;
- (62) U.S. Patent Application Publication No. 2001/0019458 to NOMURA et al., which was published on September 6, 2001;
- (63) U.S. Patent No. 4,993,815 to YAMAZAKI et al., which issued on February 19, 1991;
- (64) United Kingdom Patent Application Publication No. GB 2 344 662, which was published on June 14, 2000;
- (65) United Kingdom Patent Application Publication No. GB 2 261 298, which was published on May 12, 1993;
- (66) U.S. Patent No. 5,818,647 (mentioned above);

P23705.A01

(67) U.S. Patent No. 5,731,913 to IMANARI, which issued on March 24, 1998; and

(68) U.S. Patent No. 5,739,962 to ASAKURA et al., which issued on April 14, 1998.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United Kingdom Patent Application No. GB 0320027.6 (which is the patent family member of U.S. Patent Application No. 10/646,724, which has been listed as document No. 10), in which the United Kingdom Patent Examiner cited the following documents:

(69) U.S. Patent Application Publication No. 2003/0081948 to NOMURA et al., which was published on May 1, 2003;

(70) U.S. Patent Application Publication No. 2001/0019458 to NOMURA et al., which was published on September 6, 2001; and

(71) U.S. Patent No. 4,993,815 to YAMAZAKI et al., which issued on February 19, 1991.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 26, 2004, with respect to United Kingdom Patent Application No. GB 0320030.0 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042089, which has been listed as document No. 11), in which the United Kingdom Patent Examiner cited the following documents:

(72) U.S. Patent Application Publication No. 2003/0081948 (mentioned above); and

(73) Japanese Laid-Open Patent Publication No. 2002-277719, which was published on September 25, 2002, together with an English language Abstract of the same.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United

P23705.A01

Kingdom Patent Application No. GB 0320028.4 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051971, which has been listed as document No. 12), in which the United Kingdom Patent Examiner cited the following documents:

(74) U.S. Patent No. 5,818,647 to NISHIO et al., which issued on October 6, 1998 (mentioned above); and

(75) Japanese Laid-Open Patent Publication No. 10-282394, which was published on October 23, 1998, together with an English language Abstract of the same.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United Kingdom Patent Application No. GB 0320038.3 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042777, which has been listed as document No. 13), in which the United Kingdom Patent Examiner cited the following documents:

(76) U.S. Patent Application Publication No. 2003/081948 (mentioned above);

(77) U.S. Patent No. 5,818,647 (mentioned above); and

(78) Japanese Laid-Open Patent Publication No. 10-282394 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 13, 2004, with respect to United Kingdom Patent Application No. GB 0320037.5 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042778, which has been listed as document No. 14), in which the United Kingdom Patent Examiner cited the following documents:

(79) U.S. Patent No. 4,721,972 (mentioned above); and

P23705.A01

(80) U.S. Patent Application Publication No. 2003/0156832 to NOMURA et al., which was published on August 21, 2003. Applicant requests that the Examiner pay particular attention to this commonly-assigned document.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 10, 2004, with respect to United Kingdom Patent Application No. GB 0320039.1 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051969, which has been listed as document No. 15), in which the United Kingdom Patent Examiner cited the following documents:

- (81) U.S. Patent No. 4,721,972 (mentioned above);
- (82) U.S. Patent Application Publication No. 2003/0156832 (mentioned above); and
- (83) U.S. Patent No. 4,887,107 to NAKAMURA et al., which issued on December 12, 1989 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 10, 2004, with respect to United Kingdom Patent Application No. GB 0320040.9 (which is the patent family member of U.S. Patent Application No. 10/646,723, which has been listed as document No. 16), in which the United Kingdom Patent Examiner cited the following documents:

- (84) U.S. Patent Application Publication No. 2003/0156832 (mentioned above); and
- (85) U.S. Patent No. 4,721,972 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 11, 2004, with respect to United Kingdom Patent Application No. GB 0320042.5 (which is the patent family member of U.S.

P23705.A01

Patent Application Publication No. 2004/0051967, which has been listed as document No. 17), in which the United Kingdom Patent Examiner cited the following documents:

- (86) U.S. Patent No. 5,587,754 to KATAYAMA et al., which issued on December 24, 1996;
- (87) U.S. Patent No. 4,721,972 (mentioned above); and
- (88) U.S. Patent No. 6,052,535 to UNO, which issued on April 18, 2000.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 10, 2004, with respect to United Kingdom Patent Application No. GB 0320036.7 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042775, which has been listed as document No. 18), in which the United Kingdom Patent Examiner cited the following documents:

- (89) U.S. Patent No. 4,721,972 (mentioned above);
- (90) U.S. Patent Application Publication No. 2003/0156832 (mentioned above);
- (91) U.S. Patent No. 5,223,873 to TSUBOI, which issued on June 29, 1993;
- (92) U.S. Patent No. 5,086,312 to TANAKA et al., which issued on February 4, 1992; and
- (93) U.S. Patent No. 4,887,107 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 11, 2004, with respect to United Kingdom Patent Application No. GB 0320044.1 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042096, which has been listed as document No. 19), in which the United Kingdom Patent Examiner cited no documents.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 11, 2004, with respect to United

P23705.A01

Kingdom Patent Application No. GB 0320043.3 (which is the patent family member of U.S. Patent Application No. 10/646,860, which has been listed as document No. 20), in which the United Kingdom Patent Examiner cited the following documents:

- (94) Japanese Laid-Open Patent Publication No. 58-162914, which was published on September 27, 1983, together with an English-language abstract; and
- (95) U.S. Patent No. 5,086,312 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 11, 2004, with respect to United Kingdom Patent Application No. GB 0320041.7 (which is the patent family member of U.S. Patent Application No. 10/646,895, which has been listed as document No. 21), in which the United Kingdom Patent Examiner cited the following document:

- (96) U.S. Patent No. 5,086,312 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320054.0 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042090, which has been listed as document No. 22), in which the United Kingdom Patent Examiner cited the following documents:

- (97) U.S. Patent Application Publication No. 2003/0156832 (mentioned above); and

P23705.A01

(98) U.S. Patent No. 4,721,972 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 12, 2004, with respect to United Kingdom Patent Application No. GB 0320056.5 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042776, which has been listed as document No. 23), in which the United Kingdom Patent Examiner cited the following documents:

(99) U.S. Patent Application Publication No. 2003/0156832 (mentioned above);

(100) U.S. Patent No. 5,499,143 to SAKAMOTO et al., which issued on March 12, 1996; and

(101) U.S. Patent No. 6,069,745 to FUJII et al., which issued on May 30, 2000.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 12, 2004, with respect to United Kingdom Patent Application No. GB 0320052.4 (which is the patent family member of U.S. Patent Application No. 10/646,859, which has been listed as document No. 24), in which the United Kingdom Patent Examiner cited the following documents:

(102) U.S. Patent Application Publication No. 2003/0156832 (mentioned above); and

(103) U.S. Patent No. 4,721,972 (mentioned above).

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 23, 2004, with respect to United Kingdom Patent Application No. GB 0320053.2 (which is the patent family member of U.S. Patent Application No. 10/646,712, which is the present application), in which the United Kingdom Patent Examiner cited the following document:

(104) U.S. Patent Application Publication No. 2003/0156832 (mentioned above).

P23705.A01

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320055.7 (which is the patent family member of U.S. Patent Application Publication No. 2004/0051981, which has been listed as document No. 26), in which the United Kingdom Patent Examiner cited the following documents:

(105) U.S. Patent No. 6,324,019 to TAKANASHI et al., which issued on November 27, 2001;
and

(106) U.S. Patent No. 5,485,315 to NOMURA et al., which issued on January 16, 1996.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 25, 2004, with respect to United Kingdom Patent Application No. GB 0320035.9 (which is the patent family member of U.S. Patent Application Publication No. 2004/0042092, which has been listed as document No. 27), in which the United Kingdom Patent Examiner cited the following documents:

(107) U.S. Patent Application Publication No. 2002/0135900 (mentioned above); and

(108) European Patent Application Publication No. EP 0 634 680, which was published on January 18, 1995.

Applicant brings to the Examiner's attention a United Kingdom Search Report from the United Kingdom Patent Office that was mailed on February 24, 2004, with respect to United Kingdom Patent Application No. GB 0320029.2 (which is the patent family member of the U.S. Patent Application Publication No. 2003/0156832, which has been listed as document No. 80), in which the United Kingdom Patent Examiner cited the following documents:

(109) U.S. Patent Application Publication No. 2003/0156832 (mentioned above);

P23705.A01

(110) U.S. Patent No. 4,721,972 (mentioned above); and

(111) U.S. Patent No. 4,887,107 (mentioned above).

The category of relevance, pertinent portions, and claims to which each document is relevant, as ascertained by the United Kingdom Examiners applying United Kingdom rules to the United Kingdom claims are set forth in the enclosed United Kingdom Search Reports.

Applicant also submits herewith a copy of a Japanese Office Action, together with an English language translation of the same, that was mailed on February 10, 2004, with regard to related Japanese Patent Application No. 11-004371 (which is the patent family member of U.S. Patent No. 6,366,323, which is mentioned above as document No. 43), in which the Japanese Patent Examiner cited the following documents:

(112) Japanese Laid-Open Patent Publication No. 10-32740, which was published on February 3, 1998, together with an English language translation of the same; and

(113) Japanese Laid-Open Patent Publication No. 7-288724, which was published on October 31, 1995, together with an English language translation of the same.

The pertinent portions and claims to which each document is relevant, as ascertained by the Japanese Examiner applying Japanese rules to the Japanese claims are set forth in the Japanese Office Action.

Further to the U.S. Patent and Trademark Office's decision to waive the requirement under 37 C.F.R. §1.98 (a)(2)(i), copies of the U.S. patents and published applications are not enclosed herewith. However, if any copies are needed, the Examiner is requested to contact the undersigned.

Applicant notes that documents (50), (57), and (64) are part of the same patent family.

P23705.A01

Applicant respectfully requests that the Examiner consider the above material and cite the same. Copies of documents (16), (28)-(35), (49), (50), (52), (53), (57), (64), (65), (73), (75), (94), (108), (112), and (113) are attached and all of the above-noted published documents have been listed on the attached PTO-1449 Form. The Examiner is requested to initial the appropriate spaces on the Form and to return a copy of the Form to the Applicant with the next official communication in the present application to confirm consideration of these documents.

Applicant notes that an Office Action on the Merits has not issued in the instant application, and thus no fee is believed necessary to ensure consideration of the submitted materials. However, if an Office Action on the Merits has issued, and is crossing this statement in the mail, the undersigned hereby authorizes the Commissioner to charge any fee necessary for the consideration of this statement, including any payment under 37 C.F.R. §1.17 (p), to the undersigned's Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

Hiroshi NOMURA

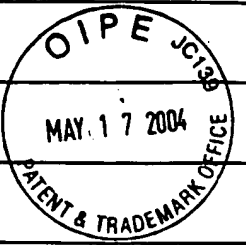
Will-Boschick

Reg. No. 44,550

Bruce H. Bernstein

Reg. No. 29,027

May 12, 2004
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office			Atty. Docket No. P23705		Serial No. 10/646,712						
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)					Applicant Hiroshi NOMURA								
					Filing Date August 25, 2003		Group 2851						
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL	2004	/ 0	0	4	2	0	9	5	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2004	/ 0	0	4	2	0	9	5	03/04/04	NOMURA			
	2004	/ 0	0	4	2	0	9	3	03/04/04	NOMURA			
	2004	/ 0	0	6	2	5	3	6	04/01/04	NOMURA			
	2004	/ 0	0	5	1	9	6	8	03/18/04	NOMURA			
	2004	/ 0	0	5	1	9	7	0	03/18/04	NOMURA			
	2004	/ 0	0	6	2	5	3	7	04/01/04	NOMURA			
	2004	/ 0	0	5	1	9	7	2	03/18/04	NOMURA			
	2004	/ 0	0	4	2	0	9	1	03/04/04	NOMURA			
	2004	/ 0	0	4	2	0	8	9	03/04/04	NOMURA			
	2004	/ 0	0	5	1	9	7	1	03/18/04	NOMURA			
	2004	/ 0	0	4	2	7	7	7	03/04/04	NOMURA			
	2004	/ 0	0	4	2	7	7	8	03/04/04	NOMURA			
	2004	/ 0	0	5	1	9	6	9	03/18/04	NOMURA			
	2004	/ 0	0	5	1	9	6	7	03/18/04	NOMURA			
	2004	/ 0	0	4	2	7	7	5	03/04/04	NOMURA			
	2004	/ 0	0	4	2	0	9	6	03/04/04	NOMURA			
	2004	/ 0	0	4	2	0	9	0	03/04/04	NOMURA			
	2004	/ 0	0	4	2	7	7	6	03/04/04	NOMURA			
	2004	/ 0	0	5	1	9	8	1	03/18/04	NOMURA			
	2004	/ 0	0	4	2	0	9	2	03/04/04	NOMURA			
		4	5	2	5	0	5	0	06/25/85	OHASHI			
		4	6	4	3	5	5	5	02/17/87	WAKABAYASHI			
		4	7	2	1	9	7	2	01/26/88	WAKABAYASHI			
		4	7	9	2	8	2	2	12/20/88	AKIYAMA et al.			
		5	8	1	8	6	4	7	10/06/98	NISHIO et al.			
		6	0	3	1	9	9	8	02/29/00	SHONO			
		4	4	5	1	1	2	9	05/29/84	IKARI et al.			
EXAMINER										DATE CONSIDERED			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office				Atty. Docket No. P23705		Serial No. 10/646,712					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)						Applicant Hiroshi NOMURA							
						Filing Date August 25, 2003		Group 2851					
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4	6	4	3	5	5	4	02/17/87	OGAWA			
		4	7	7	1	3	0	3	09/13/88	MATSUMOTO et al.			
		4	8	8	7	1	0	7	12/12/89	NAKAMURA et al.			
		5	1	3	6	3	2	4	08/04/92	TSUBOI et al.			
		5	7	6	5	0	4	9	06/09/98	HASE et al.			
		5	8	3	2	3	2	6	11/03/98	TANAKA			
		6	3	6	6	3	2	3	04/02/02	SHONO			
		6	1	1	5	1	9	0	09/05/00	HIRAI			
		6	0	6	4	5	3	3	05/16/00	KENIN et al.			
	2003	/0	0	8	1	3	2	5	05/01/03	NOMURA et al.			
	2001	/0	0	2	4	5	7	3	09/27/01	NOMURA et al.			
	2002	/0	1	3	5	9	0	0	09/26/02	NOMURA et al.			
		6	0	7	5	6	5	5	06/13/00	FUNAHASHI			
	2002	/0	1	3	5	9	0	1	09/26/02	NOMURA et al.			
	2003	/0	0	8	1	3	2	7	05/01/03	NOMURA et al.			
	2002	/0	1	3	5	8	9	6	09/26/03	NOMURA et al.			
		6	0	5	5	1	1	6	04/25/00	NOMURA et al.			
		6	2	0	4	9	7	7	03/20/01	IWASA			
		5	4	3	0	5	1	6	07/04/95	UZIIE et al.			
	2003	/0	0	8	1	9	4	8	05/01/03	NOMURA et al.			
	2001	/0	0	1	9	4	5	8	09/06/01	NOMURA et al.			
		4	9	9	3	8	1	5	02/19/91	YAMAZAKI et al.			
		5	7	3	1	9	1	3	03/24/98	IMANARI			
		5	7	3	9	9	6	2	04/14/98	ASAKURA et al.			
	2003	/0	1	5	6	8	3	2	08/21/03	NOMURA et al.			
		5	5	8	7	7	5	4	12/24/96	KATAYAMA et al.			
		6	0	5	2	5	3	5	04/18/00	UNO			
EXAMINER										DATE CONSIDERED			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

Form PTO-1449

U.S. Department of Commerce
Patent and Trademark OfficeAtty. Docket No.
P23705Serial No.
10/646,712INFORMATION DISCLOSURE STATEMENT
BY APPLICANT
(Use several sheets if necessary)Applicant
Hiroshi NOMURAFiling Date
August 25, 2003Group
2851

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER						DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5	2	2	3	8	7	3	06/29/93	TSUBOI		
		5	0	8	6	3	1	2	02/04/92	TANAKA et al.		
		5	4	9	9	1	4	3	03/12/96	SAKAMOTO et al.		
		6	0	6	9	7	4	5	05/30/00	FUJII et al.		
		6	3	2	4	0	1	9	11/27/01	TAKANASHI et al.		
		5	4	8	5	3	1	5	01/16/96	NOMURA et al.		

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER						DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	58	-	1	4	5	9	3	0	08/31/83	JAPAN			
	61	-	-	6	9	0	0	2	04/09/86	JAPAN			
	61	-	2	7	0	7	3	7	12/01/86	JAPAN			
	63	-	1	4	9	6	2	9	06/22/88	JAPAN			
	64	-	3	4		6	2	3	03/02/89	JAPAN		X	
	6	-	1	8		7	7	7	01/28/94	JAPAN		X	
	7	-	1	9	1	2	4	9	07/28/95	JAPAN			
	11	-	1	0	9	2	0	3	04/23/99	JAPAN			
	58	-	1	0		7	0	8	01/21/83	JAPAN			
	2		3	4	4	6	6	1	06/14/00	UNITED KINGDOM			
	2		2	6	2	3	5	6	06/16/93	UNITED KINGDOM			
	2003	-	2	0	7	7	0	9	07/25/03	JAPAN			
	2		3	0	9	5	5	1	07/30/97	UNITED KINGDOM			
	2		3	4	4	6	6	2	06/14/00	UNITED KINGDOM			
	2		2	6	1	2	9	8	05/12/93	UNITED KINGDOM			
	2002	-	2	7	7	7	1	9	09/25/02	JAPAN			

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. P23705		Serial No. 10/646,712								
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant Hiroshi NOMURA										
				Filing Date August 25, 2003		Group 2851								
U.S. PATENT DOCUMENTS														
EXAMINER INITIAL		DOCUMENT NUMBER			DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE					
FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER			DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO					
	10	-	2	8	2	3	9	4	10/23/98	JAPAN				
	58	-	1	6	2	9	1	4	09/27/83	JAPAN				
		0	6	3	4	6	8	0	01/18/95	E.P.O.				
		10	-	3	2	7	4	0	02/03/98	JAPAN			X	
	7	-	2	8	8	7	2	4	10/31/95	JAPAN			X	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)														
	1	English Language Abstract of JP 58-10708.												
	2	English Language Abstract of JP 2003-207709.												
	3	English Language Abstract of JP 2002-277719.												
	4	English Language Abstract of JP 10-282394.												
	5	English Language Abstract of JP 58-162914.												
EXAMINER														
DATE CONSIDERED														
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.														